

REMARKS

This is in response to the Office Action mailed September 24, 2002. Applicant acknowledges the allowance of claim 8 and the allowability of claim 6 if rewritten to include all of the limitations of the base claim and any intervening claims.

Objection to the Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "30" has been used to designate both a system and a controller.

Applicant cannot find an error in the drawings. However, the specification is in error at page 7, line 1, in stating: "The system 30 is similar to the . . . " The sentence should read: "The system 40 is similar to the" Appropriate correction has been made.

Section 102 Rejections

Claims 1 - 3 stand rejected under 35 USC §102(b) as being anticipated by Mudry, U.S. Patent 6,176,184 ("Mudry"). The Office Action states, with regard to the broadest claim, that Mudry discloses an ink drying system coupled to a source of pressurized gas and comprising a plurality of plenums, each plenum including an associated plurality of orifices; a plurality of fluid flow valves for controlling fluid communication between the plenums and the source of pressurized gas; and a controller.

Applicant respectfully traverses the rejection because it fails to make a *prima facie* case. Assuming for the sake of argument only that everything stated in the allegation is correct, it alleges only that Mudry discloses "a controller," while the claim recites the additional subject matter that the controller is "adapted to operate said valves *independently of one another* in

response to information about said printing” (emphasis added). Anticipation requires that each and everything in the claims is disclosed, either expressly or inherently described, in the reference. MPEP 2131. Therefore, absent an allegation that Mudry discloses a controller adapted as claimed, there is no *prima facie* case for anticipation.

Further, it does not appear that Mudry discloses the claimed plurality of fluid flow valves controlled by the claimed controller, nor does it appear to disclose any alternative structure that is capable of independently controlling fluid flow in a plurality of plenums.

Still further, at column 3, lines 49 - 52, Mudry states: “[a]nother improvement [of the structure disclosed] is the ability of a single set-point regulator to control the pressure to a plurality of nozzle plenums *simultaneously to a common set-point pressure*” (emphasis added). Therefore, Mudry teaches that it is advantageous to provide a controller that does not control a plurality of plenums independently as claimed, which teaches away from the claimed invention.

Section 103 Rejections

Claims 4 - 5 and 7 stand rejected under 35 USC §103(a) as being unpatentable over Mudry in view of Gershony et al., U.S. Patent No. 6,266,079 (“Gershony”). The Office Action states that Mudry differs from the claimed invention in that it does not disclose that a quantity of the ink is defined by a spatially varying distribution, identifying a spatially varying distribution of the ink, identifying one of the plenums for which the orifices most closely matches the distribution, and selecting one plenum to receive more of the pressurized gas than the other of the plenums. The Office Action further states that Gershony teaches that it is desirable to be able to finely vary the size of half-tone spots. The allegation is that it would have been obvious to modify Mudry to provide a quantity of ink having a spatially varying distribution in order to

finely vary the size of each half-tone spot.

Applicant respectfully traverses the rejections. As pointed out above, Mudry teaches against the claimed invention. Under MPEP 2145(X)(D)(2), it is improper to base the rejection on a combination that is contrary to the teachings of one of the references.

Gershony is inapposite. Gershony pertains to printing, not drying. On the other hand, the claims pertain to drying, not printing. Regardless of Gershony's teachings regarding ink spot size, Gershony does not teach or suggest how to *dry* the ink.

As there appears to be no *prima facie* case for any of the rejections, the Examiner is respectfully requested either to withdraw them, or if they are to be maintained, to issue a new non-final Office Action to give Applicant fair notice of the allegations and a fair opportunity to respond appropriately.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Garth Janke", written in a cursive style.

Garth Janke
Reg. No. 40,662



VERSION WITH MARKINGS TO SHOW CHANGES MADE

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Amended Specification:

Paragraph beginning at line 1 of page 7 has been amended as follows:

speed printing according to the present invention is shown. The system ~~40~~ 30 is similar to the system 10, except that laterally varying drying control is not particularly sought, and instead control is provided in the longitudinal dimension. The orifices 18 of each of the plenums 16 are spaced from one another so as to span entirely the total drying area TDA. The plenums are spaced apart from one another along the longitudinal dimension. Again, each plenum 16 communicates with a source "S" of pressurized gas through a respective fast acting valve 20. In this embodiment, the rate at which drying energy is applied can be tailored to a given laterally extending region of print. Particularly, drying energy is applied to the region by each plenum in succession as the region travels downstream of the printing head. The energy applied to the given region may be tailored with respect to the energy applied to other regions, by cycling the valves 20 so that a desired program of gas flow "follows" movement of the region. For example, supposing there are two plenums 16a and 16b spaced apart from one another along the longitudinal dimension indicated by the arrow. A printing head 14 lays down a laterally extending region of print corresponding to a total drying area "TDA" which travels at the speed of the sheet 12. After having been imprinted, the region TDA arrives at the plenum 16a at a time equal to d_1 divided by the speed of the sheet, and the fast acting valve 20a is operated to effect a desired flow of the gas therethrough, according to a selected "program" of drying energy for the region TDA. Later, at a time equal to the quantity $(d_1 + d_2)$ divided by the speed of the sheet

since the region TDA was printed, the region arrives at the plenum 16b, and the fast acting valve 20b is operated according to the same program. The program may provide for identical amounts of drying energy to be provided for the region TDA by each of the plenums, or it may provide for sequential attenuations of the drying energy, corresponding to the respective time delays in reaching the plenums, that take into account anticipated changes in the need for drying energy for drying the region as it moves downstream.

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